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10/560,144	06/14/2006	Sven Bjorkgard	15328.0001USWO	9488

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EXAMINER	
FREEDMAN, LAURA	
ART UNIT	PAPER NUMBER
3616	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,144	BJORKGARD, SVEN	
	Examiner	Art Unit	
	Laura Freedman	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 08 January 2009, in which claims 1-4, 6, and 7 were amended.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 1, use of the terms “it” (line 3) and "its” (line 4) make this claim confusing in that it is unclear which component can rotate along which longitudinal axis. Examiner has interpreted this portion of the claim as set forth in the prior art rejection below.

In regards to claim 1, it is unclear which “first end portions” are being referred to in the phrase “the first end portions being articulatedly attached” (line 9). For the purposes of examination, it is assumed that Applicant intended to claim “the first end portions *of the second arms* being articulatedly attached”.

In regards to claim 1, it is unclear what "therefrom" (line 12) is referring to. For the purposes of examination, it is assumed that Applicant intended to claim "extending essentially vertically up from the wheel axle housing".

Claim 2 recites the limitation "the first direction" in line 6. There is insufficient antecedent basis for this limitation in the claim.

In regards to claim 3, it is unclear if "pressure gas chamber" (lines 4 and 5) is referring to the previously claimed “pressure chamber containing a gas" (line 2), or if this is a new feature.

For the purposes of examination, it is assumed that Applicant intended to only claim one pressure chamber.

Claim 6 recites the limitation "the spring-suspension connection" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Pringle (US 4,065,153). Pringle discloses a device able to connect a wheel axle housing with a chassis of a vehicle, comprising:

- Stabilizer having a rod shaped torsion element (for example, including shaft #20 and sleeve #24) able to rotate along its longitudinal axis (for example, with the help of suitable sleeve bearings, not shown; including middle of column 2)
- Two first arms (for example, including pivot arm #30) running in a crosswise direction in relation to the torsion element and having first end portions (for example, including left portion in figure 1) rigidly attached to corresponding end portions of the torsion element (for example, as by welding; including bottom of column 2; can be seen in figure 2)
- Two second arms (for example, including collapsible link #62) having first end portions (for example, including link member #64) and second end portions (for example, including link member #66)

- The first end portions of the second arms being articulatedly attached (for example, via attachment of link member #64 to link member #66, and attachment of link member #66 to bracket #74, which is welded to pivot arm #30; articulated at bushings #70, 76, 80 and bolt/nut assemblies #72, 78, 82) to second end portions (for example, including right portion in figure 1) of the first arms (for example, as can be seen in figures 1, 4)
- The first and second arms extend at an angle in relation to the longitudinal axis of torsion element (for example, as can be seen in figures 1, 2)
- The second end portions of the second arms are connected to the wheel axle housing (for example, including axle #32; connected via attachment of link member #66 to bracket #74, which is welded to pivot arm #30, which carries axle #32) and extend essentially vertically up therefrom (for example, can be seen in figures 1, 4)
- Two spring-suspension elements (for example, including control means #84) with a first member (for example, including cylinder #88) operatively connected with the wheel axle housing (for example, connection through various brackets and links can be seen in figure 1), and a second member (for example, including piston rod #92) connected to the chassis (for example, connection through various brackets and links can be seen in figure 1)
- The first and second members are able to have reciprocal resilient movement (for example, movement can be seen in figure 1) and are able to transfer a portion of the chassis' weight to the wheel axle housing (have the ability to so perform)
- Third arms (for example, including bracket #90) having first end portions (for example, including lower end of bracket #90, as can be seen in figure 1) rigidly attached to the corresponding end portions of the torsion element (for example, welded to pivot arm #30, which is welded to sleeve #24), and second end portions (for example, including upper end

of bracket #90, as can be seen in figure 1) connected with the first member (for example, pivotally connected to cylinder #88, as can be seen in figure 1)

- The wheel axle housing is able to be raised such that a corresponding wheel (for example, including wheels #40 and tires #34) does not touch the ground (for example, as can be seen in dotted lines in figure 1; including bottom of column 3)
- The first and second members of the spring-suspension elements are able to be displaced in a lengthwise direction (for example, along length of #86) in relation to each other (for example, can be seen in figure 1)
- The spring-suspension elements comprise a force exerting means (for example, including interaction between piston rod #92, cylinder #88, and associated hydraulic components) able to move the members reciprocally in a first direction (for example, including the lengthwise direction)
- The torsion element is arranged on a side of the wheel axle housing that is directed towards the vehicle's midsection, seen in the vehicle's lengthwise direction (for example, shaft #20 and sleeve #24 are arranged to the left of the axle #32, as can be seen in figure 1, which is toward the vehicle's midsection, seen in the vehicle's lengthwise direction)
- The second member is articulatedly connected with the chassis (for example, via connection of piston rod #92 by bushings #70, 80 and bolt/nut assemblies #72, 82 to resilient means #44, which is connected to chassis components of support structure #16).

Examiner notes that while only one side of the vehicle is shown in the drawings, the other side of the vehicle has an identical configuration (including top of column 2).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pringle (US 4,065,153) in view of French Patent Document (FR 1.299.215). Pringle does not disclose the particulars of the hydraulic actuators, other than they are hydraulic, have suitable hydraulic lines and controls, and that pressure applied against piston rod moves the piston rod and causes movement of associated components (including columns 4-5). While it is old and well known in the art that an increase in pressure in a chamber formed between a piston and a cylinder of a linear actuator (for example, including #84) would cause movement of first and second members (for example, including #88, 92) in a first direction (for example, as can be seen in figure 1), and the use of pneumatic actuators in place of hydraulic actuators is also old and well known in the art, French Patent Document ('215) also teaches a pneumatic spring-suspension element for a vehicle comprising a pressure chamber containing a gas, force exerting means, pressurized gas source, reciprocal movement of actuator members, membrane defining pressure chamber, and other features (see contents of translation provided by applicant in Information Disclosure Statement dated 23 February 2006). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spring-suspension elements of Pringle to include the features of pneumatic actuators, as set forth in claims 3, 6, and 7, and taught by French Patent Document ('215), so as to retract the wheels of a vehicle using a pneumatic suspension system. Further, applying a known technique to

improve similar devices in the same way, or to a known device ready for improvement, as well as simple substitution of one known element for another, would yield predictable results.

Response to Arguments

8. Applicant's arguments, see pages 8-9, filed 08 January 2009, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 102(b) as being anticipated by VanDenberg et al. (5,540,454) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Pringle (US 4,065,153).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Conover discloses a device for connecting a wheel axle housing with a chassis of a vehicle, comprising a stabilizer having a rotatable rod shaped torsion element, two first arms rigidly attached to the torsion element, and two second arms articulatedly attached to the first arms, connected to the wheel axle housing, and extending essentially vertically up from the wheel axle housing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Freedman whose telephone number is (571) 272-2442. The examiner can normally be reached on Monday-Friday, 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura Freedman
Examiner
Art Unit 3616

/LF/

/Paul N. Dickson/
Supervisory Patent Examiner, Art Unit 3616